

Application No. 10/627,222
Amendment dated September 6, 2005
Reply to Office Action of May 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended). A process for making a highly durable, hydroentangled nonwoven fabric, consisting of the steps of;

- a) providing a fibrous matrix comprising a blend of thermoplastic fusible fibers and base fibers, said base fiber being selected from the group consisting of thermoplastic fibers and rayon fibers,
- b) consolidating the fibrous blend into a precursor web by hydroentangling the fibrous blend,
- c) hydroentangling the precursor web into a nonwoven fabric using a three-dimensional image transfer device, the three-dimensional image transfer device imparting the fibrous matrix with a three-dimensional spatial arrangement, said hydroentangling step steps being effected prior to thermal-bonding of said thermoplastic fusible fibers,
- d) elevating the temperature of the imaged nonwoven fabric such that said fusible fiber bind the fibrous blend together, thus securing the three-dimensional spatial arrangement of the fibrous matrix, and
jet-dyeing the nonwoven fabric subsequent to the elevating step.

Claim 2 (original). A process according to claim 1, wherein the thermoplastic fusible fiber has a melt temperature less than the melt temperature or the decomposition temperature of the base fiber.

Application No. 10/627,222
Amendment dated September 6, 2005
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Claim 3 (original). A process according to claim 1, wherein the thermoplastic fusible fiber is selected from the group consisting of polyamide homopolymers, polyamide co-polymers, polyamide derivatized polymers and combinations thereof.

Claim 4 (original). A process according to claim 1, wherein the thermoplastic fusible fiber is selected from the group consisting of polyesters homopolymers, polyester co-polymers, polyester derivatized polymers and combinations thereof.

Claim 5 (canceled).

Claim 6 (currently amended). A process according to claim 5 1, wherein the base fiber is thermoplastic fiber and is polyester.

Claim 7 (currently amended). A process according to claim 5 1, wherein the base fiber is natural fiber and is rayon.

Claim 8 (withdrawn). A process according to claim 1, wherein the means for elevating temperature of the imaged nonwoven fabric is by heated air.

Claim 9 (original). A process according to claim 1, wherein the means for elevating temperature of the imaged nonwoven fabric is by heated surface contact.

Claim 10 (canceled).

Claim 11 (withdrawn). A highly durable, hydroentangled nonwoven fabric, comprising a blend of fusible fiber and base fiber consolidated into a precursor web, the precursor web being hydroentangled on a three-dimensional image transfer device to impart the fusible fiber and base fiber with a specific spatial arrangement, the imaged nonwoven fabric then being subjected to elevated temperature to secure the three-dimensional spatial arrangement.

Application No. 10/627,222
Amendment dated September 6, 2005
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Claim 12 (withdrawn). A fabric according to claim 11 wherein the elevated temperature treated imaged nonwoven fabric is dyed by conventional woven textile processes.

Claim 13 (withdrawn). A fabric according to claim 12 wherein the conventional woven textile dyeing process is jet-dyeing.